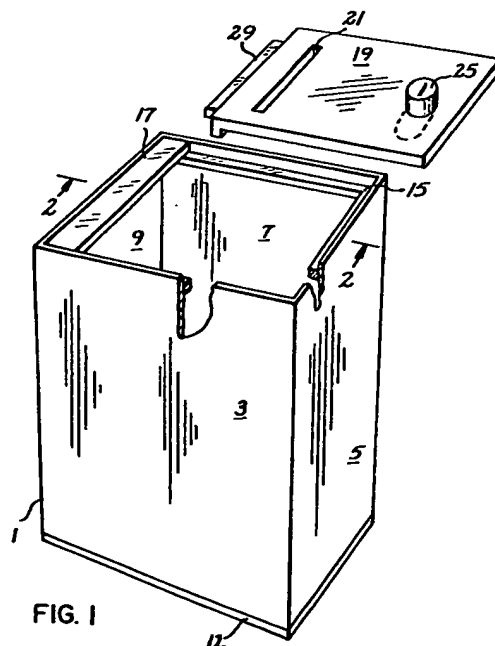


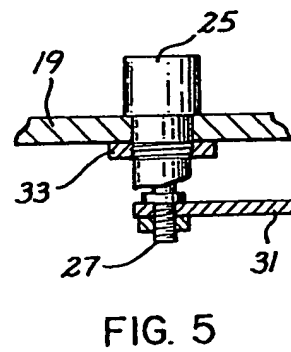
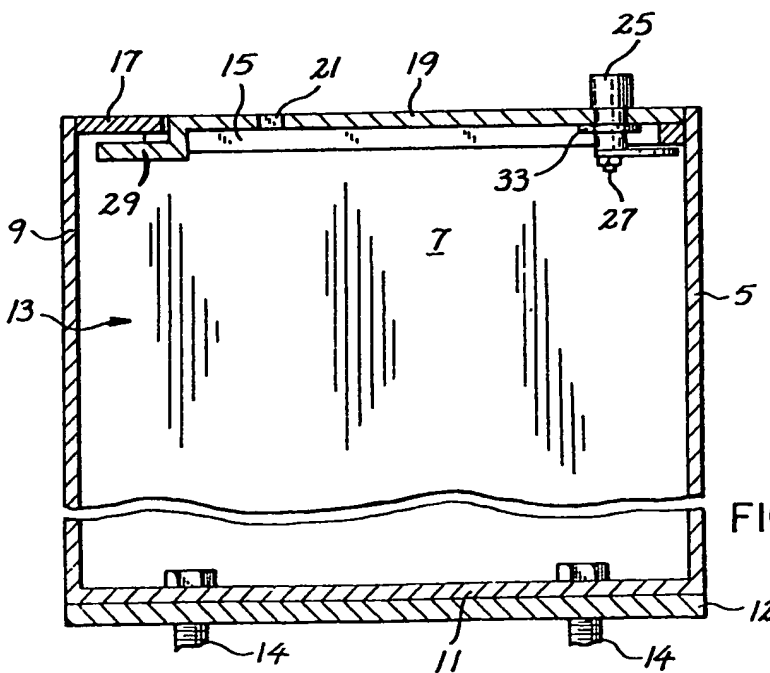
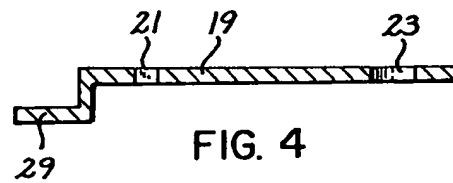
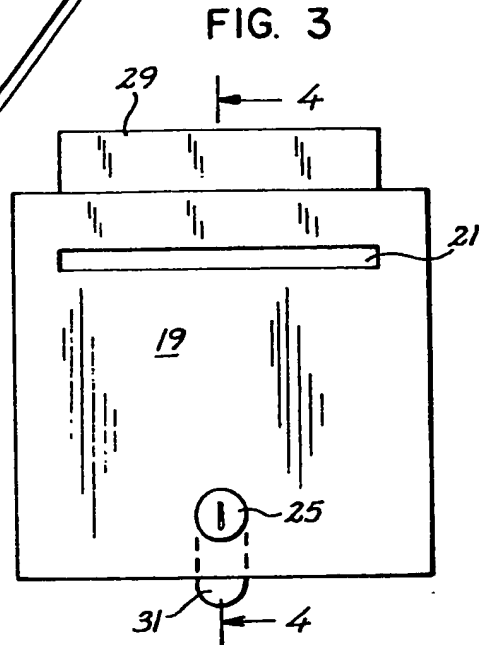
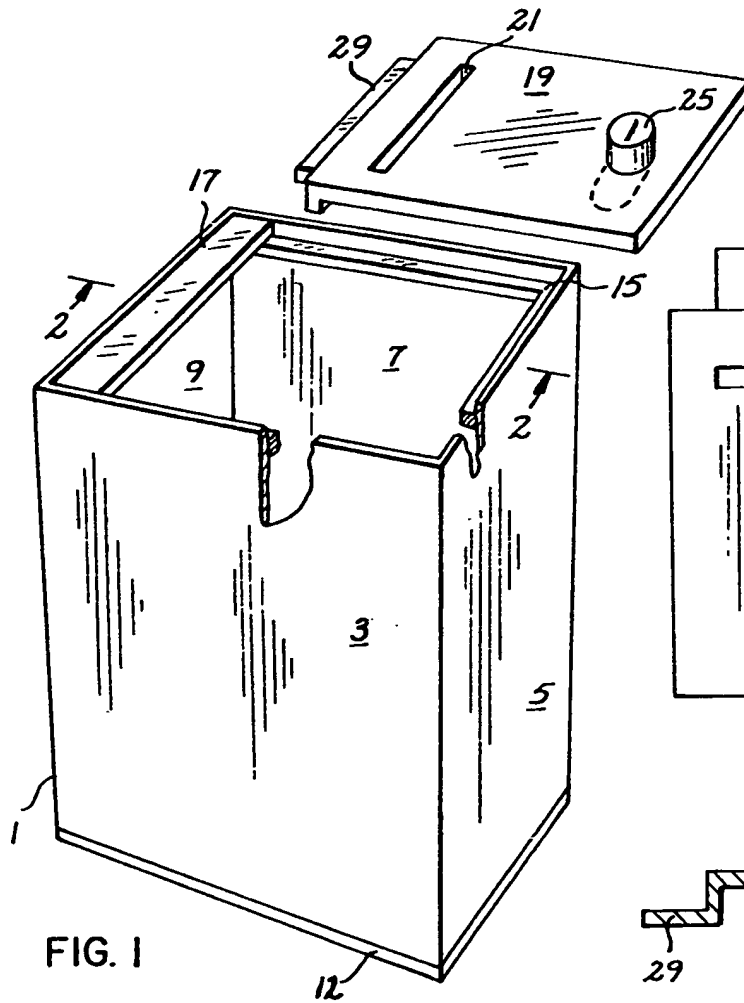
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(54) Improvements in and relating to safes having interchangeable lids and locks

(57) A safe having a removable lid with lock is constructed in such a way that the lid and lock may be removed from the box merely by disengaging the lock, pivoting and lifting out the lid. The construction is such that the door may be used on any safe of the same construction, thus making the door and lock interchangeable.



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SPECIFICATION

Improvements in and relating to safes having interchangeable lids and locks

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The invention concerns improvements in and relating to safes having removable and interchangeable lids and locks.

Conventional safes are typically extremely heavy boxes with hinged doors which may have either a combination or a key type lock. Wall safes are similar except they are designed to be mounted permanently in a wall or in a floor. During the construction of a conventional safe the door or lid is intended to fit that particular safe and be used with it for the life of the product. Thus for instance if for a hotel, motel, or block of flats it was desired to provide its guests with individual safes in each room or suite this would require a separate safe and door or lid for each room. This would present serious problems involving keys and/or combinations to the locks. The present invention solves this problem by providing a safe box which may be mounted permanently in a room yet which employs a removable closure in the form of a lid and lock which is interchangeable with any other safe box in the motel or block of flats.

An object of the invention then is to provide a safe which may be permanently mounted in a room but which is combined with a readily removable closure which may be interchanged with any other closure for a safe or like construction.

According to the present invention, a safe comprises a plurality of walls defining a cavity, a lid support shelf on at least one wall within the cavity but not on one other wall, a lid stop operatively connected to said one other wall, an optionally removable lid to close the cavity, the lid being insertable under the lid stop within the cavity and over the lid support to engage against these parts, and lock means on the lid, the lock means including a tongue optionally pivotal to a position below the lid support shelf.

Also according to the present invention, a safe comprises a plurality of walls defining a cavity for the storage of valuables, a lid support shelf on at least two of the walls within the cavity but not on one other wall, a lid stop on the other said wall within the cavity, the stop member being adjacent to and above the lid support shelf, a removable lid on the safe, the lid defining an offset lip and a lock, including a pivotal tongue, the lock being mounted on the lid, and the lid being attachable to the remainder of the safe by insertion of the lip into the cavity under the lid stop and further by rotation of the lock tongue to a position under the lid support shelf with the lid resting on and above the support shelf.

Furthermore, according to the present invention, in a method of attaching a removable safe lid having an offset lip thereon and a lock which includes a pivotable lock tongue, to a safe having four walls which define a cavity, the safe including a lid support

method comprises the steps of inserting the offset lip upon the lid within the cavity to a position wherein it engages under the lid stop, rotating the lid into the cavity until the lower surface of the lid engages and rests on a lid support shelf, and rotating the lock tongue within the cavity to a position in which it engages under the lid support shelf.

The invention will now be further described by way of example with reference to the accompanying drawings, in which:-

Figure 1 is a perspective view of a safe according to the invention, shown partially broken away to indicate details of its internal construction;

Figure 2 is a vertical sectional elevation taken along line 2-2 of *Figure 1*;

Figure 3 is a plan view of the removable door;

Figure 4 is a side elevational section of the door taken along line 4-4 of *Figure 3*; and

Figure 5 is an enlarged detail showing the construction of the lock and the tongue.

Referring now to the drawings and particularly *Figures 1* and *2*, an elongate rectangular safe has a body 1 comprised of four walls 3, 5, 7 and 9 and a bottom floor 11 reinforced by base plate 12. Body 1 defines a cavity 13 into which valuables may be deposited. Along inner walls 3, 5 and 7 near the top of body 1 is a lid support shelf 15. Along wall 9 is a lid stop 17 positioned slightly above lid support shelf 15.

Body 1 can be closed by a removable lid 19 (*Figures 3, 4* and *5*) which defines an elongate slot 21 through which items such as envelopes, or paper money may be inserted into cavity 13. Lid 19 also defines a hole 23 through which is mounted lock 25. Lock 25 includes a pivotal shaft 27 onto which is mounted a tongue 31. Lid 19 also defines a locking lip 29 which is offset slightly from the plane of the lid 19. Lip 29 is narrower than the main portion of lid 19 in an amount sufficient to prevent interference with the lid support shelf 15 on walls 3 and 7. Lock 25 may be mounted to lid 19 by any suitable means. Illustrated here lock 25 is mounted by a nut 33 bearing on the underside of lid 19 and engaging a threaded shank of lock 25.

Although shown extending around walls 3, 5 and 7, the lid support shelf 15 may be provided on only one or two of them.

In installing the safe, body 1 is first mounted permanently, by means such as bolts 14 extending through floor 11 and base plate 12, in a wall or floor of a room, for example, a closet. The removable lid 19 is inserted through the top of the box into cavity 13 so that locking lip 31 is positioned under the lid stop 17. The lid 19 is then pivoted downward onto the lid support shelf 15 in firm contact therewith. The lock 25 is then pivoted until the lock tongue 29 is under the lid support shelf 15 on wall 5. The key (not shown) to the lock is now removed and any valuables previously lodged in cavity 13 are secure. To remove lid 19, the above described process is merely reversed. When the room's occupant vacates the

be issued a new and different lid. Since all the lids are interchangeable with each box of like construction, the location of any given lid/lock combination is a matter of random choice. This obviates the problems of keeping tracks of keys and combination locks.

Having disclosed the invention and described it in detail it will be apparent to those skilled in the art that many modifications thereof could be made without departing from the scope of the invention as defined in the appended claims.

CLAIMS

1. A safe comprising a plurality of walls defining a cavity, a lid support shelf on at least one wall within the cavity but not on one other wall, a lid stop operatively connected to said one other wall, an optionally removable lid to close the cavity, the lid being insertable under the lid stop within the cavity and over the lid support to engage against these parts, and lock means on the lid, the lock means including a tongue optionally pivotal to a position below the lid support shelf.

2. A safe as claimed in Claim 1 wherein the lid includes a locking lip offset from plane of the lid, the lip being insertable within the cavity to an engaged position under the lid stop.

3. A safe as claimed in Claim 1 wherein the lid defines an elongate slot through the lid's surface opening into the cavity.

4. A safe comprising a plurality of walls defining a cavity for the storage of valuables, a lid support

shelf on at least two of the walls within the cavity but not on one other wall, a lid stop on the other said wall within the cavity, the stop member being adjacent to and above the lid support shelf, a removable lid on the safe, the lid defining an offset lip and a lock, including a pivotal tongue, the lock being mounted on the lid, and the lid being attachable to the remainder of the safe by insertion of the lip into the cavity under the lid stop and further by rotation of the lock tongue to a position under the lid support shelf with the lid resting on and above the support shelf.

5. A method of attaching a removable safe lid, having an offset lip thereon and a lock which includes a pivotal lock tongue, to a safe having four walls which define a cavity, the safe including a lid support shelf within the cavity on at least one wall but not on one other wall and a lid stop on said other one wall within the cavity above the lid support shelf, the method comprising the steps of inserting the offset lip upon the lid within the cavity to a position wherein it engages under the lid stop, rotating the lid into the cavity until the lower surface of the lid engages and rests on the lid support shelf, and rotating the lock tongue within the cavity to a position in which it engages under the lid support shelf.

6. A safe substantially as herein described with reference to and as illustrated in the accompanying drawings.

7. A method of attaching a removable safe lid to a safe substantially as herein described with reference to the accompanying drawings.